

## ..., Ah wish ye were whisky!

Kintyre is a peninsula in south-west of Scotland which stretches almost thirty miles from the Mull of Kintyre in the south to Tarbet in the north. It is long and narrow with Arran to the east and Islav beyond the Isle of Gigha to the west. Kintyre has long been a prized area for settlers including the early Scots who migrated from Ulster.

#### by Billy Mitchell

ampbeltown Loch is a small sea loch near the south of the Kintyre peninsula facing eastwards towards the Firth of Clyde. The principal town of the area is Campbeltown which is located at the head of the loch. It has been a royal burgh since the end of the eighteenth century.

Once US Special Forces left nearby Machrihanish airport to wind-turbine manufacture, the main industries remain fishing and farming although Campbeltown has a reputation as a producer of some of the world's finest malt whisky. The Scotch Whisky Regulations 2009 defines Campbeltown as one of two protected localities, the other being Islay.

Campbeltown Single Malts are single Scotch malt whiskies distilled in the burgh of Campbeltown. Once a major producer with over thirty distilleries and claiming the title 'whisky capital of the world', production has markedly declined with the majority of these distilleries now closed and out of business. Ten distilleries failed in the 19th century while a further seventeen distilleries closed between 1920 and 1935. The three distilleries producing in Campbeltown today are Springbank, Glengyle and Glen Scotia. Springbank and Glengyle are owned and operated by J & A Mitchell & Co. Ltd. while Glen Scotia is currently owned and operated by Loch Lomond distillers.

The loch is immortalised in the folk song of the same name, repopularised by Andy Stewart in the 1960s. In the song the writer Alan Cameron expresses his desire that the loch be full of whisky. The basis of that ballad is that Campbeltown was originally a centre of whisky distilling but that the price of whisky in Campbeltown itself was too high.

Och! Campbeltown Loch, Ah wish ye were whisky! Campbeltown Loch, Och Aye! Campbeltown Loch, I wish ye were whisky! Ah wid drink ye dry. Now Campbeltown Loch is a beautiful place, But the price of the whisky is

Left: The three Campbeltown distilleries; Springbank, Glengyle and Glen Scotia.







## Springbank Distillery

Springbank is a unique distillery in Scotland. It is the oldest independent family-owned distillery in Scotland, founded in 1828. It is the only mainland distillery in Scotland to produce from barley to bottle on the one site with traditional floor malting, milling, mashing, fermentation, distillation, maturation, blending and bottling all taking place in Campbeltown. The

distillery has a capacity of around 750,000 litres alcohol per annum but at present only around 100,000 litres are distilled each year and nearly all of its production is sold as single malt whisky, with very little production finding its way into blends. Most of the high-volume whisky blends from Scotland are produced by the larger whisky businesses.

#### **Production processes**

The malting process is a very traditional. It is a small-capacity and labour-intensive process steeping some 22 tonnes of barley each week. The steeping cycle is 12 hours wet, 12 hours dry, 14 hours wet, which delivers a cast moisture of around 48% wt/wt. The 22 tonnes of barley is split between two malting floors (10 tonnes and 12 tonnes) with a six





The steep vessels, malting floor and kiln at Springbank.

# **Springbank** production

Clockwise from top left: The Porteus mill. Mash tun internals showing rakes and driving gear. The six 25,000L larch

Internals of worm tub. Wash still rummager. Wash still.

washbacks.

inch deep malt bed where germination takes, on average, six days to complete. This malting process is entirely manual using shovels called shiels, made from wood, to protect the barley grains from damage during the regular turning of the malt bed.

The green malt is then dried in a Hubbard Combustion peat kiln reducing the moisture to around 4% which is an ideal moisture for storage. The drying process is altered depending on the type of malt required for the three single

malt products – Hazelburn (non peated), Springbank (lightly peated) and the heavily peated Longrow.

The milling process at Springbank is particularly impressive with each mash of 3.5 tonnes of malt milled through a seventy year old Porteus, electrically-driven eleven-belt mill. Process water is drawn from Crosshill Loch which is fed from springs seeping from Beinn Ghuilean.

Four-water mashing is undertaken in a very traditional, one-hundred-year old, cast-iron mash tun with stirring devices known as rakes. The first two sugar-rich waters are fed forward to fermentation while the last two are recovered as first two waters of the next mash. Wet draff removed at this mashing stage is sold into the local farming community as animal feed.

Fermentation is carried out in six boat-skin larch washbacks, each of

25,000 litres capacity with a collection temperature of 16°C. Compressed yeast (Distillers M) is added to the washbacks with fermentation time ranging between 70-110 hours with a final wash strength of between 4.5%-5.0%ABV.

Springbank has one wash still and two spirit stills of fairly traditional copper design and external shape, with traditional condenser and worm tub condensation arrangements, one for each of the spirit stills. The three products of Springbank, Longrow and Hazelburn are recovered at strengths of 76-60%ABV, 69-58%ABV and 79-63%ABV for the three spirit cuts respectively.

Springbank single malt is the most popular variant. It is distilled two and a half times and is neither chill filtered nor does it have any added colour.

Distilling whisky two and a half

















Far left: Empty cask storage in the yard.

Left: Inside the racked cask warehouse.

times is quite unusual - this means that some of the low wines are collected before the second distillation and then mixed back into the feints for another distillation. This means that some parts of the liquid have been through distillation twice and some parts three times.

The wash still at Springbank is fired both externally from the base by an open oil flame and internally by steam coils while the spirit stills are heated by internal steam coils. A copper chain called a rummager is fitted on the inside of the base of the

wash still and is rotated on an arm to prevent solid deposition in the still during distillation – this and the fact the wash still is heated externally by live flame is quite different to the more modern malt distillation processes.

Longrow single malt whisky is a double-distilled, highly peated whisky while Hazelburn is a tripledistilled, non-peated whisky. Neither are coloured or chill-filtered and both of these single malt whiskies are named after two nowdefunct Campbeltown distilleries.

The new-make spirit for each of the three single malts is reduced to 63.5% ABV and then aged in exbourbon and sherry casks, although a small proportion is matured in refill casks. A small proportion of this matured malt whisky finds its way into two of its own blends, namely Campbeltown Loch and Mitchell's 12-year-old.

The eight on-site warehouses hold approximately 13,500 casks in bond. The small, labour-intensive bottling hall, has an output of some 300 cases per day.

...the fact the wash still is heated externally by live flame is auite different to the more modern malt distillation processes.

### **Glengyle Distillery**

lengyle is a distillery originally founded in 1872 by the same Mitchell family which was involved with Springbank distillery. Various exchanges of ownership took place before the distillery ceased all production in 1925 with the ensuing sale of all remaining whisky stocks. Various attempts were made to reopen the distillery in the 1940s and 1950s but none succeeded.

In late 2000 the site was purchased by J&A Mitchell. Only the shell of the original distillery remained and major renovations took place over the next four years before production could restart in 2004. This involved the purchase and installation of all major plant malt mill, lauter tun, washbacks, stills and all ancillary equipment. Some of this equipment was new while other equipment was sourced from either closed or redeveloped distilleries.

Both Springbank and Glengyle distilleries are owned and operated by J&A Mitchell – a single management and production team ensure consistency of operation across the two distilleries while the same raw materials are processed at both sites. The capacity for Glengyle

distillery is stated as 750,000 litres alcohol per annum, similar to that of Springbank. However, production at Glengyle is usually between 30,000 - 50,000 litres alcohol per annum. To date, the two distilleries have never produced concurrently due to new-make spirit production requirements.

#### **Production processes**

Dried malt is delivered from sister distillery Springbank and milled through a Boby mill procured from Craigellachie distillery when it was redeveloped.

The four-tonne mash tun was specially commissioned and manufactured by Forsyth's in Rothes - it is a semi-lauter tun design with fine mesh flooring to deliver a clear wort from this mashing process. Glengyle uses a three-water mash process unlike the four-water process at Springbank. Process water is also drawn from Crosshill Loch. Wet draff removed at this mashing stage is sold to local farmers as animal feed.

Four new boat-skin larch washbacks, each of 30,000 litre capacity, were built by Arthur Brown of Dufftown on site. A collection



Wash and spirit stills and copper condensers.

temperature of circa 16°C ensures maximum fermentation temperature does not exceed 35°C. The fermentation time is at least 72 hours although more generally longer with Distillers M compressed yeast delivering wash strengths of 4.5-5.0% ABV at end of fermentation.

The two stills, spirit safe and associated equipment were sourced from the Ben Wyvis distillery at Invergordon which had closed in 1976. These were altered (changed the shape of the shoulders and angle



Above: The four washbacks at Glengyle.

Above right: Glengyle and Springburn manager Gavin McLachlan.

In early 2013 Glen Scotia

extended its bottle range

to include 10yr, 12yr, 16yr,

18yr and 21yr. In addition,

with a range-wide graphic

of a long-haired Highland

cow under the northern

different colour scheme.

The entire range is now

lights, each year

differentiated by a

bottled at a heftier

46%ABV.

it updated its packaging

of the lye pipes) to provide more spirit reflux and to ensure compatibility with the redeveloped site.

The whisky from the Mitchell's Glengyle distillery is not called Glengyle as this is the name associated with the Loch Lomond Distillers vatted malt. The single malt is bottled under the name Kilkerran – this is derived from the Scottish Gaelic: *Ceann Loch Cille Chiarain* (head of the lake of Saint



Kieran's cell), which is where the Saint is believed to have had a religious cell. The settlement around it is now the modern Campbeltown. The layout of this redeveloped distillery is quite unique and offers a great view of a very simple end-to-end distilling process where the mash tun sits at one end, the stills, condensers and associated equipment at the other end. In between these two processes sit the four washbacks – all on the one first-

floor level. This a great place for new recruits to the world of whisky to view the end-to-end processes albeit at a fairly small scale of production.

#### The manager

Campbeltown born and bred Gavin McLachlan is the Distillery Manager and along with his thirty staff has the responsibility for all production activities at Springbank and Glengyle distilleries. Gavin began his distilling career in 2002 having previously worked in a variety of non-distilling roles in the Campbeltown area. He worked in the bottling hall, malting and distillery before being appointed Assistant Distillery Manager in 2006. He acknowledges that he learned much of the art of distilling from previous Technical Directors and Senior Management and takes great pride that a native of Campbeltown is manager of this local distillery. He says he loves coming to work each day, revels in the lack of computer screens and is still surprised by the steady flow of visitors wanting to see the process.

## **Glen Scotia Distillery**

Glen Scotia distillery or Scotia, as it was originally known, was built in 1832 by Stewart Galbraith and Co, the partners being James Stewart and John and William Galbraith.

Like many of the Campbeltown distilleries before them, the distillery went through many changes of ownership and periods of closure until 1996 when Loch Lomond distillers took it over.

Since 2013 the current owners have overseen a significant increase in annual output and more recently have delivered a significant capital expenditure investment to upgrade much of the distillery. The distillery

capacity is reckoned at 750,000 litres alcohol per annum but current production is nearer 350,000 litres.

#### **Production processes**

Dried malt, sourced from their proprietary malt supplier, is delivered by road and stored in two fifty-tonne malt bins, ready for further processing. The Glen Scotia distillery cycles production between non-peated, peated and heavily-peated malt to ensure a broad flavour spectrum of new-make spirit is produced.

Malted barley is processed through Buhler grain cleaning and de-stoning equipment prior to

milling in a 1950s Boby mill. The de-stoner, aspiration and filter unit are part of the recent capital upgrade programme.

The grist is pre-weighed and fed via a Steels masher to a very traditional cast iron mash tun. The grist is mashed using four successive waters of increasing temperature with the first two waters forwarded as worts to fermentation while the last two are recovered as first and second waters for the next mash – 2.68 tonnes of malt are processed per mash. Process water is drawn

from Crosshill Loch. Wet draff removed at this mashing stage is sold to local farmers.

The hot wort is cooled to 20°C through a plate heat-exchanger and pumped to one of six stainless-steel washbacks – again this is a recent capital investment which replaced the six, forty-year-old, Corton steel washbacks. Compressed yeast (Distillers M and MX) deliver a wash strength between 7%–8%ABV at the end of fermentation. Fermentation time is on average 80 hours

Conventionally, Glen Scotia produces new-make spirit via a two-stage distillation process. The wash and spirit stills and the new, recently installed shell and tube condensers are made of copper, the traditional metal of construction in the Scotch whisky industry. Thermal energy is provided by steam through two kettles in the wash still and coils in the spirit still. New-make spirit is recovered with a spirit cut between 74%-63% ABV to the spirit receiver via the spirit safe.

The new-make malt spirit is reduced with fresh, clean Crosshill loch water to 63.5% ABV prior to filling into ex-bourbon casks for maturation.

Below: Tending the spirit safe at Glen Scotia.



Left The Buhler de-stoner at Glen Scotia.

Right: Boby mill.

Below: Rakes and internal gearing in the mash tun.

Below right: The new stainless washbacks.









#### The manager

Iain J McAlister has been the Distillery Manager of Glen Scotia since March 2008 and along with his four distillery operators has overseen a period of significant change. Technical developments, improvements in efficiency and spirit quality, capacity expansion and the delivery of significant capital investment plan have all been delivered whilst maintaining production output.

Like the manager of Springbank and Glengyle, Iain is born and bred in the Campbeltown area and only fairly recently joined the distilling industry having previously held a number of engineering roles with Scottish Water. He considers himself to be privileged to have this



role and feels that Glen Scotia and Campbeltown are vitally important to the wider distilling industry, having such a rich and important early history and association with whisky. He acknowledges there has been a very steep learning curve with relation to the whisky process but has an enthusiasm and energy to continue to drive ongoing developments at Glen Scotia.

Left: Wash and spirit stills. The inset shows the 'steam kettles' in wash still.

Bottom right: Glen Scotia manager lain McAlister outside the distillery.

#### In conclusion...

It should come as no surprise to the readers that each of these three small distilleries in Campbeltown must comply with a wide range of legislation which includes all aspects of Health and Safety, Her Majesty's Revenue and Customs, Environmental and general risk activities. This places a significant workload onto the small management and operational teams based in the town and a visit to one or all of these distilleries will readily see how compliance is achieved.

Unique is undoubtedly the best word to describe Campbeltown. How could such a small town with a population at its maximum of nine thousand have initiated such a large number of distilleries in a very small area? How could some of the biggest names originate in Campbeltown? This was the Victorian and Edwardian whisky powerhouse. The remaining distilleries in Campbeltown are a great place to visit to compare the old and a more modern approach to malt whisky production.

The 'old' traditions of malt whisky production can be easily seen during a tour of Springbank while a more modern technology driven process can be seen at both Glengyle and Glen Scotia.

All of these processes lead to a similar conclusion in that malt whisky production remains a vibrant and very important part of life in Campbeltown delivering a wonderful mix of full-flavoured malt whiskies reflecting the glorious history of a bygone era – a great place for the whisky enthusiast to visit.

